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United States **Government** **Department of Energy**

memorandum

DATE March 31, 1995

REPLY TO ATTN OF Office of Environmental Policy and Assistance (EH-413): Bascietto:6-7919

SUBJECT Baseline Risk Assessment: Toxicity and Exposure Assessment and Risk Characterization

TO: Distribution

The purpose of this memorandum is to provide Department of Energy (DOE) Program Offices and Field Organizations with a copy of an environmental guidance document entitled: *"(CERCLA Baseline Risk Assessment Manual for Toxicity and Exposure Assessment and Risk Characterization."* This document is directed primarily to DOE and DOE contractor personnel responsible for planning, managing and communicating risk assessment information for environmental restoration projects performed under the Comprehensive Environmental Response, Compensation and Lability Act (CERCLA). Notwithstanding, the attached document provides information to all personnel interested in gaining both-an understanding of selected baseline risk assessment topics and a perspective on the evolving nature of risk assessment guidance in the CERCLA program.

Over recent years the U.S. Environmental Protection Agency (EPA) has developed a considerable body of guidance about developing baseline risk assessments for uncontrolled hazardous waste sites. But the manner in which EPA's guidance is interpreted and applied can have a great impact on the risk estimates obtained and, in turn, on the remedial option selected to reduce those risks. In general, lower baseline risk estimates should necessitate less costly remedial options than will higher risks. This document was written to (1) guide project personnel through the process of interpreting EPA guidance and (2) help project personnel to discuss EPA guidance with regulators, decision makers, and stakeholder as it relates to conditions at a particular DOE environmental restoration site.

This environmental guidance document provides detailed insight into the science policy issues underlying the CERCLA baseline risk assessment process as it is implemented today by EPA, and serves as a continuing reference work that can be consulted for information on the baseline risk assessment process in the DOE environmental restoration program. To the extent possible, given the evolving nature of risk assessment guidance in general, the document attempts to summarize the Agency's up-to-date national guidance to EPA regional offices on selected CERCLA baseline risk assessment topics, and, through an historica1 perspective, examines how certain guidance has changed over time. This perspective facilitates a discussion of the pros, cons, weaknesses, uncertainties, and policy areas where more than one interpretation may be acceptable for each of the topics covered. Additionally, the document identifies reference materials for risk analysts who may desire a more in-depth understanding of a particular topic. A primary intent of this guidance is to assist in facilitating a thoughtful discourse on baseline risk assessment issues among the Department's environmental restoration project managers and their regulators.

A earlier draft of the attached document, entitled: "CERCLA Baseline Risk Assessment Issues" was circulated within DOE headquarters field elements for review and comment. EH-413 endeavored to ensure that the DOE perspective, and in particular the environmental restoration program CERCLA experience, has been accurately represented. To that end, the draft manual has been improved through the incorporation of the comments received from a select group of DOE headquarters and Field Organization representatives. The comments received by EH-413 reflected substantial DOE experience in planning, managing and communicating CERCLA baseline risk assessments.

Questions concerning the CERCLA baseline risk assessment guidance topics covered, or other comments on the information contained in the attached document, may be directed to John Bascietto of my staff by calling (202) 586-7917, fax to (202) 586-3915 and electronic mail at Internet address john.bascietto@hq.doe.gov.

Thomas T. Traceski
Director, RCRA/CERCLA Division
Office of Environmental Policy and Assistance

Attachment

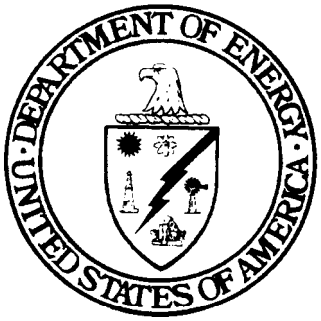
DOE/EH-0484

CERCLA BASELINE RISK ASSESSMENT

Reference Manual

for

Toxicity & Exposure Assessment and Risk Characterization



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Prepared by

U.S. DEPARTMENT OF ENERGY
OFFICE OF ENVIRONMENTAL POLICY & ASSISTANCE
(formerly the Office of Environmental Guidance)
RCRA/CERCLA DIVISION
(EH-413)
Washington, D.C.

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Table of Contents

List of Figures

List of Tables